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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/760,010      | 01/10/2001  | Steven H. Bass       | 02-100620US         | 2748             |

22798 7590 07/12/2002  
QUINE INTELLECTUAL PROPERTY LAW GROUP, P.C.  
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EXAMINER  
CHUNDURU, SURYAPRABHA

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 1637     | (Signature)  |

DATE MAILED: 07/12/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                      |              |
|------------------------------|----------------------|--------------|
| <b>Office Action Summary</b> | Application No.      | Applicant(s) |
|                              | 09/760,010           | BASS ET AL.  |
|                              | Examiner             | Art Unit     |
|                              | Suryaprabha Chunduru | 1637         |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 10 January 2001.

2a) This action is **FINAL**.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-299 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) \_\_\_\_\_ is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) 1-299 are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

- 1) Certified copies of the priority documents have been received.
- 2) Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- 3) Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a)  The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

1)  Notice of References Cited (PTO-892)      4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_ .

2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)      5)  Notice of Informal Patent Application (PTO-152)

3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ .      6)  Other: \_\_\_\_\_ .

**DETAILED ACTION**

**Restriction/Election**

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-99, drawn to a device or integrated system comprising an array of reaction mixtures classified in class 702, subclass 19.
  - II. Claims 100-127, drawn to a diversity generation device comprising a programmed thermocycler and fragment classified in class 435, subclass 91.2.
  - III. Claims 128-160, drawn to a method of processing shuffled or mutagenized nucleic acids, classified in class, subclass 91.2.
  - IV. Claims 161-219, 247-280, drawn to a method of recombining members of physiological or logical array of nucleic acids, classified in class 382, subclass 128.
  - V. Claims 220-241, drawn to a method of detecting or enriching for invitro transcription or translation products, classified in class 435, subclass 19.
  - VI. Claims 242-246, drawn to a method of normalizing an array of reaction mixtures, classified in class 382, subclass 128.
  - VII. Claim(s) 281, drawn to a library of diversified heterologs, classified in class 536, subclass 55.
  - VIII. Claims 282-284, drawn to an integrated system comprising an array of plurality of heteroduplexes, classified in class 345, subclass 627.
  - IX. Claims 285-287, drawn to a method of directing nucleic acid fragmentation, classified in class 700, subclass 667.

X. Claims 288-298, drawn to a method of selecting one or more parental nucleic acids for diversity generation using a computer, classified in class 356, subclass 300.

XI. Claim(s) 299, drawn to a web page directing nucleic acid diversity generation, classified in class 716 and subclass 17.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions I, II, XI and III-VI, VIII-X are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the products of inventions I-II, and XI can be used in materially different processes as computing data processing or data automation.

Inventions I-II, and VII, XI are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed in inventions can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the products as claimed in Inventions I-II, can be used in materially different processes such as sequencing assays or nucleic acid purification assays.

Groups I and II are unrelated and distinct from one another because the product in Group I can be used in materially different processes such as automated enzyme activity analysis or in enzyme kinetics analysis.

Group I is independent and distinct from each of groups II -XI because (a) a product of Group I is materially different from each of the inventions and can be used in materially different processes such as automated enzymatic reaction assays or sequencing assays.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and divergent subject matter, restriction for examination purposes as indicated is proper.

4. This application contains claims directed to the following species of the claimed invention:

- a. physical array of reaction mixtures
- b. logical arrays of reaction mixtures
- c. shuffled or mutagenized nucleic acids
- d. transcribed shuffled or transcribed mutagenized nucleic acids.

Applicant is required to elect a single disclosed species for prosecution on the merits.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added.

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

6. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.

*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suryaprabha Chunduru whose telephone number is 703-305-1004. The examiner can normally be reached on 8.30A.M. - 4.30P.M, Mon - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Benzion reached on 703-308-1119. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-0294 for regular communications and - for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

*8fc*  
Suryaprabha Chunduru  
July 8, 2002

*JF*  
JEFFREY FREDMAN  
PRIMARY EXAMINER